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TOWNSEND and TOWNSEND and CREW LLP

By:

Tiffany Wu

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

41 2175  
PATENT  
Attorney Docket No.: 018563-003100US  
Client Reference No.: AT-00082

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SEP 17 2004

Technology Center 2100

In re application of:

BARRY A. SIMKINS

Application No.: 09/620,253

Filed: July 20, 2000

For: SYSTEMS AND METHODS FOR  
MASS CUSTOMIZATION

09/14/2004 LWONDIM1 00000032 201430 09620253

01 FC:1806 180.00 DA

Examiner: BAHTA, KIDEST

Art Unit: 2125

SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT UNDER 37  
CFR §1.97 and §1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Electronic copies of the references are enclosed on 1 CD-ROM disk.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

The references cited in the accompanying PTO/SB/08A and PTO/SB/08B, were identified by either or both parties in litigation between Align Technology, Inc., assignee of the above-referenced patent application, andOrmco Corporation in case no. SACV 03-16-GLT

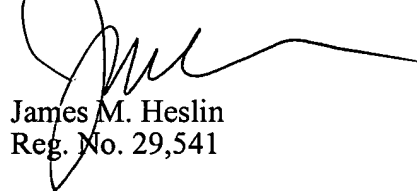
(ANX) before the U.S. District Court, Central District of California, Southern Division, as being potentially relevant to the design, fabrication, and/or use of removable orthodontic appliances and/or to the use of computers or other automatic means for calculating final or intermediate tooth positions for orthodontic treatment.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



James M. Heslin  
Reg. No. 29,541

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet **1** of **10**

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Application Number 09/620253

Filing Date July 20, 2000

**SEP 17 2004**

First Named Inventor SIMKINS, BARRY A.

Art Unit 2125

**Technology Center 2100**

Examiner Name BAHTA, KIDEST

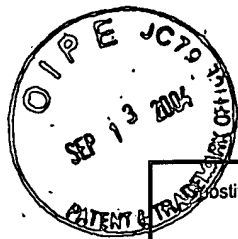
Attorney Docket Number 018563-003100US

**U.S. PATENT DOCUMENTS+**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	AA	2,467,432	04-19-1949	Kesling	
	AB	3,660,900	05-09-1972	Andrews	
	AC	3,860,803	01-14-1975	Levine	
	AD	3,916,526	11-04-1975	Schudy	
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	AU	4,798,534	01-17-1989	Breads	
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	BM	5,131,844	07-21-1992	Marinaccio et al.	
	BN	5,139,419	08-18-1992	Andreiko et al.	
	BO	5,184,306	02-02-1993	Erdman et al.	

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	09/620253		
		Filing Date	July 20, 2000		
		First Named Inventor	SIMKINS, BARRY A.		
		Art Unit	2125		
Sheet	2	of	10	Examiner Name	BAHTA, KIDEST
				Attorney Docket Number	018563-003100US

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		Number Kind Code <sup>2</sup> (if known)			
	BP	5,186,623	02-16-1993	Breads et al.	
	BQ	5,257,203	10-26-1993	Riley et al.	
	BR	5,273,429	12-28-1993	Rekow et al.	
	BS	5,278,756	01-11-1994	Lemchen et al.	
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	BU	5,340,309	08-23-1994	Robertson	
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	BW	5,368,478	11-29-1994	Andreiko et al.	
	BX	5,382,164	01-17-1995	Stern	
	BY	5,395,238	03-07-1995	Andreiko et al.	
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	CJ	5,549,476	08-27-1996	Stern	
	CK	5,587,912	12-24-1996	Andersson et al.	
	CL	5,605,459	02-25-1997	Kuroda et al.	
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	CO	5,655,653	08-12-1997	Chester	
	CP	5,683,243	11-04-1997	Andreiko et al.	
	CQ	5,733,126	03-31-1998	Andersson et al.	
	CR	5,740,267	04-14-1998	Echerer et al.	
	CS	5,975,893	11-02-1999	Chishti et al.	

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Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	CT	EP	091,876	A1	10-19-1983	Duret		<input type="checkbox"/>
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	CV	EP	376,873	A2	07-04-1990	Shafir		<input type="checkbox"/>
	CW	EP	490,848	B1	06-17-1992	Andersson et al.		<input type="checkbox"/>
	CX	EP	541,500	A1	06-12-1998	Andersson et al.		<input type="checkbox"/>

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60301603 v1



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		Application Number	09/620253
		Filing Date	July 20, 2000
		First Named Inventor	SIMKINS, BARRY A.
		Art Unit	2125
Examiner Name	BAHTA, KIDEST		
Attorney Docket Number	018563-003100US		
Sheet	3	of	10

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		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	CY	EP	731,673	B1	09-18-1998	Andersson et al.		<input type="checkbox"/>
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	DA	FR	2,652,256	A1	03-29-1991	Jourda		<input type="checkbox"/>
	DB	FR	2,369,828	A1	06-02-1978	Suyehiro		<input type="checkbox"/>
	DC	WO	90/08,512	A1	08-09-1990	Lemcren		<input type="checkbox"/>
	DD	WO	91/04,713	A1	04-18-1991	Jourda et al.		<input type="checkbox"/>
	DE	WO	94/10,935	A1	05-26-1994	Andreiko et al.		<input type="checkbox"/>
	DF	WO	98/44,865	A1	10-15-1998	Andersson		<input type="checkbox"/>
	DG	WO	98/58,596	A1	12-30-1998	Chishti et al.		<input type="checkbox"/>

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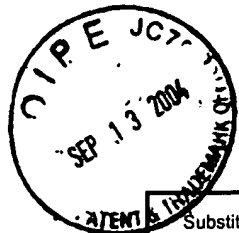
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NON PATENT LITERATURE DOCUMENTS			
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	DH	ALEXANDER et al., "The DigiGraph Work Station Part 2, Clinical Management," JCO (July 1990), pp. 402-407.	
	DI	ALTSCHULER et al., "Laser Electro-Optic System for Rapid Three-Dimensional (3D) Topographic Mapping of Surfaces," Optical Engineering, Vol. 20(6) (1981), pp. 953-961.	
	DJ	ALTSCHULER et al., "Measuring Surfaces Space-Coded by a Laser-Projected Dot Matrix," SPIE Imaging Applications for Automated Industrial Inspection and Assembly, vol. 182 (1979), p. 187-191.	
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	DM	American Association for Dental Research, Summary of Activities, March 20-23, 1980, Los Angeles, CA, p. 195.	
	DN	ANDERSSON et al., "Clinical Results with Titanium Crowns Fabricated with Machine Duplication and Spark Erosion," Acta Odontologica Scandinavica, vol. 47 (1989), pp. 279-286.	
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	DQ	BAUMRIND et al., "Seminars in Orthodontics," Seminars in Orthodontics, Vol. 7, No. 4 (Dec. 2001), p. 222.	
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	DV	BHATIA et al., "A Computer-Aided Design for Orthognathic Surgery," British Journal of Oral and Maxillofacial Surgery, Vol. 22 (1984), pp. 237-253.	
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Examiner Signature		Date Considered	
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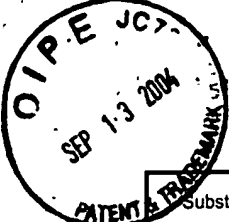
**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	DX	BIGGERSTAFF, "Computerized Diagnostic Setups and Simulations," <i>The Angle Orthodontist</i> , Vol. 40, No. 1 (Jan. 1970), pp. 28-36.	
	DY	BRANDESTINI et al., "Computer Machined Ceramic Inlays: In Vitro Marginal Adaptation," <i>Journal of Dental Research</i> , Vol. 64/Special Issue/Abstracts, IADR/AADR Abstracts 1985, 1 page total.	
	DZ	BROOK et al., "An Image Analysis System for the Determination of Tooth Dimensions from Study Casts: Comparison with Manual Measurements of Mesio-distal Diameter, Abstract of Papers, 1985, Dept. of Children's Dentistry and Orthodontics, <i>J Dent Res.</i> , March 1986, pp. 428-431.	
	EA	BURSTONE (interview), "Dr. Charles J. Burstone on The Uses of the Computer in Orthodontic Practice (Parts 1 and 2)," <i>Journal of Clinical Orthodontics</i> , (Part 1) Vol. 8, No. 7, July 1979; (Part 2) Vol. 8, No. 8 pp. 539-551, Aug. 1979.	
	EB	BURSTONE et al., "Precision adjustment of the transpalatal lingual arch: Computer arch form predetermination," <i>Am. Journal of Orthodontics</i> , Vol. 79, No. 2 (Feb. 1981), pp. 115-133.	
	EC	CHACONAS et al., "The DigiGraph Work Station, Part 1, Basic Concepts," <i>JCO</i> (June 1990), pp. 360-367.	
	ED	CHAFETZ et al., "Subsidence of the Femoral Prosthesis, A Stereophotogrammetric Evaluation," <i>Clinical Orthopaedics and Related Research</i> , No. 201 (December 1985), pp. 60-67.	
	EE	CHIAPPONE, "Constructing the gnathologic setup and positioner" <i>J. Clin. Orthod.</i> , 14:121-133, 1980.	
	EF	COTTINGHAM, "Gnathologic clear plastic positioner" <i>Am. J. Orthod.</i> , 55:23-31, 1969.	
	EG	CRAWFORD, "Computers in Dentistry: Part 1: CAD/CAM: The Computer Moves Chairside," "Part 2: F. Duret — A Man With A Vision," "Part 3: The Computer Gives New Vision- Literally," "Part 4: Bytes 'N Bites" The Computer Moves From The Front Desk To The Operatory, <i>Canadian Dental Journal</i> , vol. 54(9), (1988), pp. 661-666.	
	EH	CRAWFORD, "CAD/CAM in the Dental Office: Does It Work?" <i>Canadian Dental Journal</i> , Vol. 57, No. 2 (Feb. 1991), pp. 121-123.	
	EI	CROOKS, "CAD/CAM Comes to USC," <i>USC Dentistry</i> , (Spring 1990) pp. 14-17.	
	EJ	CURETON, "Correcting malaligned mandibular incisors with removable retainers" <i>J. Clin. Orthod.</i> , 30:390-395, 1996.	
	EK	CURRY et al., "Integrated Three-Dimensional Craniofacial Mapping at the Craniofacial Research Instrumentation Laboratory/University of the Pacific," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), pp. 258-265.	
	EL	CUTTING et al., "Three-Dimensional Computer-Assisted Design of Craniofacial Surgical Procedures: Optimization and Interaction with Cephalometric and CT-Based Models," <i>Plastic and Reconstructive Surgery</i> , Vol. 77, No. 6 (June 1986), pp. 877-885.	
	EM	DCS Dental AG, "The CAD/CAM 'DCS Titan System' for Production of Crowns/Bridges" <i>DSC Production AG</i> , Jan. 1992, pp. 1-7.	

Examiner  
SignatureDate  
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	EN	DEFRANCO et al., "Three-Dimensional Large Displacement Analysis of Orthodontic Appliances," <i>J. Biomechanics</i> , Vol. 9 (1976), pp. 793-801.	
	EO	Dental Institute University of Zurich Switzerland, Program for International Symposium on Computer Restorations: State of the Art of the CEREC-Method, May 1991, 3 pages total.	
	EP	DenTrac Corporation, Dentrac document, pp. 4-13.	
	EQ	DURET et al., "CAD-CAM in Dentistry," <i>Journal of the American Dental Association</i> , Vol. 117 (Nov. 1988), pp. 715-720.	
	ER	DURET et al., "CAD/CAM imaging in dentistry," <i>Current Opinion in Dentistry</i> , Vol. 1 (1991), pp. 150-154.	
	ES	DURET, "The Dental CAD/CAM, General Description of the Project," <i>Hennson International Product Brochure</i> , Jan. 1986., 18 pages total.	
	ET	DURET, "Vers une prothese informatisee," (English translation also attached), <i>Tonus</i> , vol. 75, (Nov. 15, 1985), pp. 55-57.	
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Application Number			09/620253		
Filing Date			July 20, 2000		
First Named Inventor			SIMKINS, BARRY A.		
Art Unit			2125		
Examiner Name			BAHTA, KIDEST		
Attorney Docket Number			018563-003100US		
Sheet	7	of	10		

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	FD	HOFFMANN et al., "Role of Cephalometry for Planning of Jaw Orthopedics and Jaw Surgery Procedures," (Article Summary in English, article in German), <i>Informationen</i> , (March 1991), pp. 375-396.	
	FE	HUCKINS, "CAD-CAM Generated Mandibular Model Prototype from MRI Data," <i>AAOMS</i> 1999, p. 96.	
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	FG	JCO Interviews, "Craig Andreiko, DDS, MS on the Elan and Orthos Systems", JCO, (Aug. 1994), pp. 459-468.	
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	FK	KAMADA et al., "Case reports on tooth positioners using LTV vinyl silicone rubber" <i>J. Nihon University School of Dentistry</i> , 26(1):11-29, 1984.	
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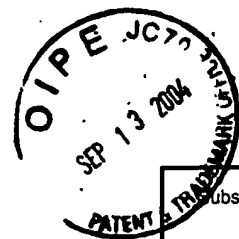
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	FT	MCNAMARA et al., <i>Orthodontic and Orthopedic Treatment in the Mixed Dentition</i> , Needham Press, January 1993. pp.347-353.	
	FU	MCNAMARA et al., "Invisible Retainers", <i>J. Clinical Orthodontics</i> , (August 1985) pp. 570-578.	
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	FW	MÖRMANN et al., "Marginal Adaptation von adhasiven Porzellaninlays in vitro," <i>Schwizerische Monatsschrift für Zahnmedizin</i> , Vol. 85 (1985), p. 1118-1129.	
	FX	MÖRMANN et al., "Marginale Adaptation von adhäsiven Porzellaninlays in vitro," Separatdruck aus: Schweiz. Mschr. Zahnmed. 95: 1118, 1985.	
	FY	NAHOUM, "The vacuum formed dental contour appliance" <i>The New York State Dental Journal</i> , 30(9):385-390, Nov. 1964.	
	FZ	NASH, "CEREC CAD/CAM Inlays: Aesthetics and Durability in a Single Appointment," <i>Dentistry Today</i> , (October 1990), pp. 20, 22-23, 54.	
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	GD	PONITZ, Invisible Retainers, 59 <i>Am. J. Orthodontics</i> , March 1971, pp. 266-272.	
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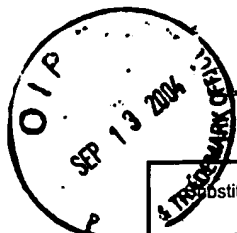
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			Art Unit	2125	
			Examiner Name	BAHTA, KIDEST	
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	GJ	REKOW, "Feasibility of an Automated System for Production of "Dental Restorations," PhD Thesis, Univ. of Minnesota, Nov. 1988, 244 pages total.		
	GK	RICHMOND et al., Research Reports, "The development of a 3D Cast Analysis System," <i>British Journal of Orthodontics</i> , pp. 53-54.		
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	GO	SHELLHAS et al., "Three-Dimensional Computer Tomography in Maxillofacial Surgical Planning," <i>Arch Otolamgol Head Neck Surg.</i> Vol. 114 (April 1988), pp. 438-442.		
	GP	SEGU et al., "Computer-aided Cefalometry and New Mechanics in Orthodontics" (Article Summary in English, article in German), <i>Fortschr. Kieferorthop.</i> 44, 370-376 (Nr. 5), 1983		
	GQ	SHILLIDAY, "Minimizing finishing problems with the mini-positioner" <i>Am. J. Orthod.</i> 59:596-599, 1971		
	GR	Siemens, "CEREC - Computer-Reconstruction," <i>High Tech in der Zahnmedizin</i> , 14 page total.		
	GS	Sirona Dental Systems GmbH, CEREC 3D, Manuel utilisateur, Version 2.0X (in French), 2003, 114 pages total.		
	GT	STOLL et al., "Computer-aided Technologies in Dentistry" (Article Summary in English, article in German), <i>Dtsch Zahnärztl Z</i> 45, 314-322, 1990.		
	GU	U.S. Department of Commerce, National Technical Information Service, "Automated Crown Replication Using Solid Photography SM," Solid Photography Inc. Melville NY, October 1977, 21 pages total.		
	GV	U.S. Department of Commerce, National Technical Information Service, "Holodontography: An Introduction to Dental Laser Holography," School of Aerospace Medicine Brooks AFB Tex, March 1973, 37 pages total.		
	GW	U.S. Provisional Patent Application No. 60/050342, filed on June 20, 1997, 41 pages total.		
	GX	VAN DER LINDEN et al., Three-Dimensional Analysis of Dental Casts by Means of the Optocom," <i>J Dent Res</i> , July-August 1972, p. 1101.		
	GY	VAN DER LINDEN, "A New Method to Determine Tooth Positions and Dental Arch Dimensions," July-August 1972, p. 1104.		

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	GZ	VAN DER ZEL, "Ceramic-fused-to-metal Restorations with a New CAD/CAM System," <i>Quintessence International</i> , vol. 24(11) (1993), pp. 769-778.	
	HA	VARADY et al., "Reverse Engineering of Geometric Models - An Introduction," May 13, 1996, pp. 1-28.	
	HB	WARUNEK et al., "Clinical use of silicone elastomer appliances" <i>JCO</i> , MH (10):694-700, 1989.	
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	HE	WILLIAMS, "Dentistry and CAD/CAM: Another French Revolution," <i>Journal of Dental Practice Admin.</i> , Jan./March 1987, pp. 2-5.	
	HF	WILLIAMS, "The Switzerland and Minnesota Developments in CAD/CAM," <i>Journal of Dental Practice Admin.</i> , pp. 50-55, April/June 1987.	
	HG	WISHAN, "New Advances in Personal Computer Applications for Cephalometric Analysis, Growth Prediction, Surgical Treatment Planning and Imaging Processing," Symposium: Computerized Facial Imaging in Oral and Maxillofacial Surgery, AAOMS, Sept. 13, 1990, p. 5.	
	HH	YAMAMOTO et al., "Three-Dimensional Measurement of Dental Cast Profiles and Its Applications to Orthodontics," Annual Int'l Conf. of IEEE Engineering in Medicine and Biology Society, Vol. 12, No. 5, pp. 2051-2053, 1990	
	HI	YAMAMOTO et al., "Optical measurement of dental cast profile and application to analysis of three-dimensional tooth movement in orthodontics," <i>Frontiers in Med. and Biol. Eng'g</i> , Vol. 1, No. 2 (1988), pp. 119-130.	

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